We claim:

1. A printhead chip for an inkjet printhead, the printhead chip comprising

a wafer substrate that incorporates drive circuitry, the wafer substrate defining a plurality of ink inlet channels; and

nozzle arrangements positioned on the wafer substrate, each nozzle arrangement comprising

a passive nozzle chamber structure that extends from the wafer substrate and bounds a respective ink inlet channel;

a dynamic nozzle chamber structure that, together with the passive nozzle chamber structure, defines a nozzle chamber, and has a roof that defines the ink ejection port, the dynamic nozzle chamber structure being displaceable towards the wafer substrate into an actuated position and away from the wafer substrate into a rest position such that a drop of ink can be ejected from the ink ejection port, and

an elongate micro-electromechanical actuator connected between the wafer substrate and the dynamic nozzle chamber structure, the actuator including a beam assembly that has an active beam of a conductive material, capable of thermal expansion, that defines a heating circuit and is connected to the drive circuitry and a passive beam that is interposed between the active beam and the wafer substrate such that, when the active beam receives an electrical signal from the drive circuitry, the active beam expands relative to the passive beam driving the dynamic nozzle structure into the actuated position to generate the drop of ink and when the signal is cut off subsequent cooling of the active beam causes the dynamic nozzle structure to move back to the rest position, facilitating a separation of the drop of ink.

2. A printhead chip as claimed in claim 1, in which each dynamic nozzle chamber structure includes a skirt portion that depends from the roof inwardly of the passive nozzle structure, such that an edge of the skirt portion is proximate an edge of the passive structure in the rest position, the edges of the skirt portion and the passive structure being configured so that, when the nozzle chamber is filled with ink, a meniscus is defined between the edges, the

meniscus defining a fluidic seal as the dynamic structure is displaced between the actuated and rest positions.

3. A printhead chip as claimed in claim 2, in which the edge of each skirt portion is positioned between three and six microns above the wafer substrate, when the dynamic structure is in the rest position.

4. A printhead chip as claimed in claim 1, in which each beam assembly has an arm that interconnects the beams and the dynamic structure, so that displacement of the active and passive beams is transferred to the dynamic structure via the arm.

5. A printhead chip as claimed in claim 1, in which each passive beam is fixed, at one end, to the substrate, but insulated from the drive circuitry and fixed at an opposed end to the arm and each active beam is fixed, at one end, to the substrate to be electrically connected to the drive circuitry layer and also fixed at an opposed end to the arm..

6. A printhead chip as claimed in claim 1, in which each passive beam and each passive nozzle structure are of the same material.